## STAFFORD COUNTY SCHOOL BOARD

**Agenda Consideration** 

TOPIC: Approval of Purchase: School ITEM NO: 10I

**Network Cable Replacements** 

PREPARED BY: Andrea Bengier, Assistant Superintendent for

Instruction and Technology

Dave Mirra, Director of Instructional Technology and Information Services

Mike Ballard, Technology Supervisor

MEETING: May 23, 2006 ACTION DATE: June 20, 2006

**ACTION REQUESTED BY THE SUPERINTENDENT:** That the Stafford County School Board approve the replacement of all network cabling at North Stafford and Brooke Point High Schools by TC Associates of Springfield, VA. Total estimated cost of this replacement will be \$321,250.12.

## **KEY POINTS:**

- The network infrastructures at North Stafford (NSHS) and Brooke Point (BPHS) High Schools have been cause for concern for both school staff and the Office of Instructional Technology and Information Services (IT/IS) for several years. Network infrastructure was not considered in the initial design of these buildings. As a result, the current patchwork network architecture is:
  - o Inefficient in that it does not logically flow from a few, discrete locations within the buildings. Some cable runs exceed manufacturer's recommendations because closer network closets cannot be upgraded due to space limitations or weight considerations (for overhead mounted racks);
  - Difficult to administer and upgrade due to inaccessibility of many of the switch racks as well as problems with tracing illogically laid-out cable runs; and,
  - o In some cases (particularly where 12 foot stepladders are required to access the components located above the drop ceilings in student-occupied hallways), unsafe to the employees tasked with the equipments' repair and maintenance.
- These problems negatively impact network speed and reliability. The NSHS Commonwealth Governor's School (CGS) required costly and manpower-intensive direct cable connections to resolve degraded distance learning system performance problems caused by the current network architecture.
- As demand for network-supported services increase, the current designs will continue to hamper, disrupt and in some cases, preclude needed and mandated instructional and administrative applications at the NSHS/BPHS sites.
- The work package includes removal and disposal of unusable wiring, consolidation of existing wire closets into modern, safer and more maintainable designs, and installation and testing of the new cabling.
- The project will be done by TC Associates, Inc. under their GSA Contract Number GS-35F-0623M.

## SCHOOL BOARD GOALS:

- 2. Integrate technology in support of all instruction.
- 5: Provide facilities that promote student learning and community support.

## **FUNDING SOURCE:**

Contractor/VendorFunding Source (Technology Infrastructure)AmountTC Associates, Inc(Materials) Stafford County Technology Infrastructure Loan Funds\$182,089.70(Labor) Local Technology Infrastructure Funds\$139,160.42

AUTHORIZATION REFERENCE: Stafford County Public Schools Integrated Technology Plan (2004-2010)